

Amendments to the Claims

The listing of claims will replace all prior versions, and listings of claims in the application.

1-13. (Cancelled.)

14. (Currently Amended) An isolated cell population derived from human bone marrow, wherein ~~greater than about 91% of~~ the cells of the cell population co-express CD49c and CD90, and wherein the cell population ~~has~~ maintains a doubling rate of less than about 30 hours after 30 cell doublings.

15-18. (Cancelled.)

19. (Previously Amended) The isolated cell population of Claim 14, wherein the cells have the potential to differentiate into a preselected phenotype.

20. (Previously Amended) The isolated cell population of Claim 19, wherein the preselected phenotype is at least one member selected from the group consisting of a chondrocyte, an astrocyte, an oligodendrocyte, a neuron, an osteocyte, an osteoblast, an osteoclast, a cardiomyocyte, a pancreatic islet cell, a skeletal muscle, a smooth muscle, a hepatocyte and a retinal ganglial cell.

21. (Currently Amended) The isolated cell population of Claim 14, further including expression of p21 or p53 after between about 20 to about 50 population doublings of the cells, wherein expression of p53 is a relative expression of up to about 3000 transcripts of p53 per 10^6 transcripts of an 18s rRNA and expression of p21 is a relative expression of up to about 20,000 transcripts of p21 per 10^6 transcripts of an 18s rRNA.

22-24. (Cancelled.)

25. (Previously Amended) The isolated cell population of Claim 14, wherein the cell population does not express CD34 and/or CD45.

26. (Previously Amended) The isolated cell population of Claim 14, wherein the cell population further expresses at least one trophic factor selected from the group consisting of BDNF, IL-6, NGF and MCP-1.

27-96. (Cancelled.)